

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	1	11/314452	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/18 17:34
S2	3	"20060113622"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/18 17:50
S3	17	(tamer near2 refaat) or (nurul near2 abedin) or (oleg near2 sulima) or (syed near2 ismail) or (upendra near2 sing)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:45
S4	19	(tamer near2 refaat) or (nurul near2 abedin) or (oleg near2 sulima) or (syed near2 ismail) or (upendra near2 singh)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:45
S5	2	S4 and antimony	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:46
S6	10625	(alingaassb or algaassb or inga assb or algasb or gasb)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:46
S7	1015	S6 and emitter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:47

S8	696	S7 and base	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:47
S9	351	S8 and collector	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:47
S10	198	S9 and light	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:47
S11	68	S10 and base.ti,ab,clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:47
S12	281373	S11 nad collector.ti,ab, clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:47
S13	49	S11 and collector.ti,ab, clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:48
S14	44	S13 and emitter.ti,ab, clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:48
S15	16	S14 and (alingaassb or algaassb or inga assb or algasb or gasb or sb or antimony).ti,ab,clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:49

S16	11	S14 and (alingaassb or algaassb or inga assb or algasb or gasb or sb or antimony).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:50
S17	3	S16 and (alingaassb or algaassb or inga assb or algasb or gasb or sb or antimony).ab.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:51
S18	31339	((emitter or collector or base) near10 (sb or antimony)).ab.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:52
S19	74	((emitter or collector or base) near10 (sb or antimony)).ab. and ((emitter or collector or base) near10 (sb or antimony)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:52
S20	2	("6452242").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:54
S21	0	S20 and (antimony or sb).ab.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:55
S22	0	S20 and (antimony or sb).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:55
S23	1	S20 and (antimony or sb)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:55

S24	53	(US-20080203425-\$ or US-20080116465-\$ or US-20070295994-\$ or US-20070063219-\$ or US-20060226444-\$ or US-20060126424-\$ or US-20050098811-\$ or US-20050041711-\$ or US-20050012106-\$ or US-20040200523-\$ or US-20030205722-\$ or US-20030064538-\$ or US-20020190272-\$ or US-20020031853-\$ or US-20080073640-\$ or US-20080014886-\$ or US-20070001315-\$). did. or (US-7450161-\$ or US-7310361-\$ or US- 7297589-\$ or US- 7053431-\$ or US- 6974977-\$ or US- 6696710-\$ or US- 6677707-\$ or US- 6600178-\$ or US- 6525349-\$ or US- 6498050-\$ or US- 6436784-\$ or US- 5977557-\$ or US- 5844253-\$ or US- 5831337-\$ or US- 5726462-\$ or US- 5503685-\$ or US- 5389804-\$ or US- 5280182-\$ or US- 5151618-\$ or US- 5027179-\$ or US- 4973858-\$ or US- 4801993-\$ or US- 4518979-\$ or US- 4439910-\$ or US- 4388633-\$ or US- 3700980-\$).did. or (US- 7459794-\$ or US- 6521506-\$ or US- 6521504-\$ or US- 5420442-\$ or US- 6452242-\$).did. or (WO-2005074042-\$). did. or (US- 20070284616-\$ or WO- 2005074042-\$ or US- 20020031853-\$ or WO- 0171812-\$).did.	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2009/03/05 12:56
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S25	9	S24 and ((gasb or (gallium near2 antimony)) near10 substrate)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:57
S26	18	((gasb or (gallium near2 antimony)) near2 substrate) same emitter same base same collector	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 12:59
S27	6	S26 and (alingaassb or algaassb or ingaassb or algasb)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:01
S28	185	(alingaassb or algaassb or ingaassb or algasb). clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:02
S29	159	(alingaassb or algaassb or ingaassb or algasb). ab.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:02
S30	14	S28 and S29	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:03
S31	7	S30 and (gasb or (gallium near antimony)) near2 substrate	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:03
S32	5354	hpt	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:05

S33	297	S32 and (antimony or sb)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:05
S34	0	S33 and (algaassb or ingaassb)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:05
S35	749	(algaassb or ingaassb)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:05
S36	19	S35 and (hpt or phototransistor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:06
S37	5	S36 and (algaassb or ingaassb).ti,ab,clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:06
S38	19	S36 and (algaassb or ingaassb)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:07
S39	392	((gasb or (gallium near2 antimony)) near2 substrate)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:08
S40	81	S39 and (algaassb or ingaassb)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:08

S41	5	S39 and ((emitter or collector or base) near10 (algaassb or ingaassb))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:10
S42	4	S39 and ((emitter) near10 (algaassb or ingaassb))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:11
S43	4	S42 and ((base) near10 (algaassb or ingaassb))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:11
S44	1	S43 and ((collector) near10 (algaassb or ingaassb))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:11
S45	31	((emitter) near10 (algaassb or ingaassb))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:11
S46	10	S45 and ((collector) near10 (algaassb or ingaassb))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:11
S47	9	S46 and ((base) near10 (algaassb or ingaassb))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:12
S48	376	257/185.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:25

S49	1574	257/185.ccls. or 257/187.ccls. or 257/ E31.022.ccls. or 257/ E31.069.ccls. or 438/94. ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:27
S50	28	S49 and (gasb or (gallium near antimony)) near5 substrate	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:28
S51	1	S50 and (emitter near10 (alingaassb or algaassb or ingaassb or algasb or gasb))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:28
S52	549	(gasb or (gallium near antimony)) near5 substrate	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:29
S53	32	S52 and (emitter near10 (alingaassb or algaassb or ingaassb or algasb or gasb))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:29
S54	0	"I55" and (collector near10 (alingaassb or algaassb or ingaassb or algasb or gasb))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:29
S55	19	S53 and (collector near10 (alingaassb or algaassb or ingaassb or algasb or gasb))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:29
S56	0	S54 and (basenear10 (alingaassb or algaassb or ingaassb or algasb or gasb))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:29



S57	0	S54 and (base near10 (alingaassb or algaassb or ingaassb or algasb or gasb))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:29
S58	19	S55 and (base near10 (alingaassb or algaassb or ingaassb or algasb or gasb))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:29
S59	12	S52 and (emitter near10 (alingaassb or algaassb or ingaassb or algasb or gasb)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:31
S60	10	S59 and (base near10 (alingaassb or algaassb or ingaassb or algasb or gasb)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:32
S61	7	S60 and (collector near10 (alingaassb or algaassb or ingaassb or algasb or gasb)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:32
S62	64	ichiro near hase	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:34
S63	118	(US-20080203425-\$ or US-20080116465-\$ or US-20070295994-\$ or US-20070063219-\$ or US-20060226444-\$ or US-20060126424-\$ or US-20050098811-\$ or US-20050041711-\$ or US-20050012106-\$ or US-20040200523-\$ or US-20030205722-\$ or US-20030064538-\$ or US-20020190272-\$ or US-20020031853-\$ or US-20080073640-\$ or US-20080014886-\$ or US-20070001315-\$ or	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2009/03/05 13:35

US-20030032253-\$ or  
US-20020070390-\$ or  
US-20040201036-\$ or  
US-20040223529-\$ or  
US-20030231680-\$ or  
US-20030179803-\$ or  
US-20030123501-\$ or  
US-20080197289-\$ or  
US-20060226440-\$).  
did. or (US-  
20050056864-\$ or US-  
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5280182-\$ or US-  
5151618-\$ or US-  
5027179-\$ or US-  
4973858-\$ or US-  
4801993-\$ or US-  
4518979-\$ or US-  
4439910-\$ or US-  
4388633-\$ or US-  
3700980-\$).did. or (US-

		7459794-\$ or US- 6521506-\$ or US- 6521504-\$ or US- 5420442-\$ or US- 6452242-\$ or US- 6806512-\$ or US- 6727153-\$ or US- 6482711-\$ or US- 6320212-\$ or US- 5907159-\$ or US- 5124771-\$ or US- 4173763-\$ or US- 7256417-\$ or US- 6975660-\$ or US- 6635907-\$ or US- 5315608-\$ or US- 5308804-\$ or US- 5251225-\$ or US- 4195305-\$ or US- 7049641-\$ or US- 6987306-\$ or US- 6888973-\$ or US- 6741354-\$ or US- 6724018-\$ or US- 6559949-\$ or US- 5767560-\$ or US- 5257086-\$).did. or (US- 4476477-\$ or US- 6057506-\$ or US- 6043426-\$ or US- 5769964-\$ or US- 6903387-\$ or US- 6670653-\$ or US- 6583455-\$ or US- 5489785-\$ or US- 4916495-\$).did. or (WO-2005074042-\$). did. or (JP-05326929-\$ or JP-03038834-\$ or JP- 02232931-\$ or JP- 02232930-\$).did. or (US-20070284616-\$ or WO-2005074042-\$ or US-20020031853-\$ or WO-0171812-\$ or EP- 440139-\$).did.				
S64	5	S63 and (ingaassb or algaassb) near2 emitter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:36

S65	15	S63 and ((ingaassb or algaassb alingaassb or algaassb or ingaassb or algasb or gasb)) near2 emitter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:38
S66	9	S65 and ((ingaassb or algaassb alingaassb or algaassb or ingaassb or algasb or gasb)) near2 collector	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:38
S67	9	S66 and ((ingaassb or algaassb alingaassb or algaassb or ingaassb or algasb or gasb)) near2 base	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:39
S68	53	((ingaassb or algaassb alingaassb or algaassb or ingaassb or algasb or gasb)) near2 base	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:40
S69	14	S68 and ((ingaassb or algaassb alingaassb or algaassb or ingaassb or algasb or gasb)) near2 collector	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:40
S70	9	S69 and ((ingaassb or algaassb alingaassb or algaassb or ingaassb or algasb or gasb)) near2 emitter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:40
S71	36	((ingaassb or algaassb alingaassb or algaassb or ingaassb or algasb or gasb)) near base	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:41
S72	11	S71 and ((ingaassb or algaassb alingaassb or algaassb or ingaassb or algasb or gasb)) near collector	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:42

S73	6	S72 and ((ingaassb or algaassb alingaassb or algaassb or ingaassb or algasb or gasb)) near emitter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:42
S74	901	((ingaassb or algaassb alingaassb or algaassb or ingaassb or algasb or gasb)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:42
S75	30	((((ingaassb or algaassb alingaassb or algaassb or ingaassb or algasb or gasb)) with emitter).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:42
S76	23	S74 and (((ingaassb or algaassb alingaassb or algaassb or ingaassb or algasb or gasb)) with collector).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:43
S77	20	S76 and (((ingaassb or algaassb alingaassb or algaassb or ingaassb or algasb or gasb)) with base).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:43
S78	330	((((ingaassb or algaassb alingaassb or algaassb or ingaassb or algasb or gasb)) with base)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:45
S79	53	S78 and (((ingaassb or algaassb alingaassb or algaassb or ingaassb or algasb or gasb)) with collector)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:45
S80	45	S79 and (((ingaassb or algaassb alingaassb or algaassb or ingaassb or algasb or gasb)) with emitter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:45

S81	20	S80 and (gasb with substrate)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 13:46
S82	2	"5124771".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/05 14:03
S83	3	("5124771").URPN.	USPAT	OR	ON	2009/03/05 14:03
S84	1	("5436469").URPN.	USPAT	OR	ON	2009/03/05 14:03
S85	3	("5124771").URPN.	USPAT	OR	ON	2009/03/05 14:03
S86	4	S83 or S84 or S85	USPAT	OR	ON	2009/03/05 14:04
S87	1	"5124771".pn.	USPAT	OR	ON	2009/03/05 14:05
S88	1	"6452242".pn.	USPAT	OR	ON	2009/03/05 14:05
S89	0	"09534234"	USPAT	OR	ON	2009/03/05 14:06
S90	2	"09/534234"	USPAT	OR	ON	2009/03/05 14:06
S91	406	donghee near kang	USPAT	OR	ON	2009/03/05 14:13

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